Serial No. Not Yet Assigned

Atty. Doc. No. 2002P03970WOUS

Amendments To The Specification:

In the English translation document, please delete the term --Description-- at page 1 line 1, before the title.

In the English translation document, please add the paragraph at page 1 line 5, after the title, as follows:

-- CROSS REFERENCE TO RELATED APPLICATIONS

This application is the US National Stage of International Application No. PCT/DE03/00954, filed March 21, 2003 and claims the benefit thereof. The International Application claims the benefits of German application No. 10214540.7 filed April 2, 2002, both of the applications are incorporated by reference herein in their entirety.—

In the English translation document, please add the section heading at page 1 line 5, after the newly added CROSS REFERENCE TO RELATED APPLICATIONS section, as follows:

--FIELD OF INVENTION--

In the English translation document, please add the section heading at page 1 line 9, as follows:

--BACKGROUND OF INVENTION--

In the English translation document, please add the section heading at page 2 line 3, as follows:

--SUMMARY OF INVENTION--

In the English translation document, please amend the paragraph at page 2 lines 8-11, as follows:

This object is achieved by a web server comprising software modules whereby at least one first software module has first means for the implementation of an automation functionality and secondar means for accessing a realtime operating system.

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In the English translation document, please amend the paragraph at page 4 lines 1-6, as follows:

In order to utilize available internet security mechanisms, it is proposed that the web server has a connection through a firewall to the internet. With regard to the already commonly encountered web server extension features integrated into an automation component, the security mechanisms required on the internet cannot as a rule be implemented on account of their tight elearances requirements.

In the English translation document, please add the section heading at page 4 line 22, as follows:

--BRIEF DESCRIPTION OF THE DRAWINGS--

In the English translation document, please add the section heading at page 4 line 28, as follows:

-- DETAILED DESCRIPTION OF INVENTION--

In the English translation document, please amend the paragraph at page 5 line 15 to page 7 line 9, as follows:

The concept underlying the invention will be described in the following with reference to Figure 1. A web server is a process on a computer - or it can also be distributed over a plurality of computers - and normally supplies a very large number of clients (web browsers on different machines) with information. This information can either be located statically on the web server or it can however also be generated dynamically by further utility routines. The usual communication partners connected by way of the internet 1 are therefore web servers in the embodiment of the fifth web server 24 and web browser 26. The fifth web server 24 makes available information, generally internet pages, by way of the internet 1 at the request of a web browser 26. The concept of the invention thus consists in configuring such a standard web server through extension by means of software modules in such a way that it is also capable of performing automation functions. The first web server 3 contains an extension module 4 which takes over the functions of a stored program control facility (SPS) or programmable logic control (PLC). To this end, the extension module 4 as part of the web

server 3 is connected using a connection 5 to an input/output module of an automation system. The first web server 3 is thus used not only for supplying information by way of the connection 2 onto the internet 1, but can perform complex control functions as a result of the integration of the extension module 4, functions which in the prior art were only capable of being executed by independent stored program control facilities. Figure 1 shows a further embodiment of the web server according to the invention in the second web server 10 which comprises an extension module 11 having CNC functionality (CNC = Computer Numerical Control). By way of the extension module 11, the second web server 10 controls a computercontrolled machine tool 13 (CNC machine tool) which is used for high-speed and precision manufacture of complicated turned and milled parts. Complicated control functions of this type are normally executed by computers individually specified for the purpose. Control of a drive 18 proves to be a similarly complex control task, which is handled by the third web server 15 in the embodiment. To this end, it contains an extension module 16 which handles the exacting functions involved in control and regulation of the drive 18. In order not to buy the advantages of using web technologies through the second and the third web server 10, 15 at the price of the disadvantage of lacking security, the web servers 10, 15 are linked by way of a firewall 8 to the internet 1. The firewall 8 effectively prevents invalid access attempts over a communication link 7 to one of the web servers and thus to the drive 18 or the machine tool 13. With regard to a further embodiment of the invention shown in Figure 1, the web server having automation functionality is a so-called embedded web server 20 which in the form of an extension module 21 contains a temperature regulation facility for controlling a valve 22. This embedded web server 20 is implemented for example as a single-chip solution inside a personal computer (PC). In addition to the automation functionality of the extension modules, each of the web servers described 3, 10, 15 and 20 also offers the full functionality and thus all the advantages of a standard web server 24. The web browser 26 linked by way of the internet 1 can thus also access the web servers 3, 10, 15 and 20 expanded to include automation functionality, using web technologies, and thus be used for example as an operator control and monitoring system. The embodiments illustrated in Figure 1 clearly show the enhanced scalability of the solution proposed here compared with conventional approaches. The web server can be implemented as a single-chip web server with a hardware add-on (for example in the consumer sector) through to the high-performance web server with SoftPLC

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and Office software.